

=====

OUTPUT 12

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MEM. STRG. USED 02122

01450 THRU 01463

01500 THRU 03605

LOK	INSTR	L110	LO	
		0	INT2	PROG*1219B*FACT*0C1*67
		1		REMARK*1219B FACT MODIFIED FROM 1219 FACT
		2		REMARK*INTEGRATED MEMORY TEST
01450	46 1462	3	INT2	STRAU*INT21 SAVE ALL AND AL INPUT PARAMETERS
01451	44 1463	4		STRAL*INT22
01452	76 1477	5	INT20	RJP*SIZE-1 EXECUTE CONTROL MEMORY TEST
01453	10 1462	6		ENTAU*INT21
01454	12 1463	7		ENTAL*INT22
01455	76 3677	10		RJP*MAIN-1 EXECUTE MAIN MEMORY TEST
01456	50 5620	11		STOP*20 KEY 4
01457	10 1462	12		ENTAU*INT21
01460	12 1463	13		ENTAL*INT22
01461	34 1452	14		JP*INT20 CONTINUE TEST
01462	00 0000	15	INT21	0*
01463	00 0000	16	INT22	0*
		17	SIZE	PROG*1219B*FACT*0C1*67
		20		REMARK*1219B FACT MODIFIED FROM 1219 FACT
		21		REMARK*CONTROL MEMORY TEST
01500	44 3114	22	SIZE	STRAL*ALPARM SAVE INITIAL AL INPUT PARAMETER
01501	76 3512	23		RJP*TYPE TYPT AND TYPC SETUP
01502	12 3114	24		ENTAL*ALPARM INITIAL AL INPUT PARAMETER
01503	65 1505	25		JPALP*LOK+2 NON N+1 BUFFER TERMINATION
01504	76 3565	26		RJP*IOSET N+1 BUFFER TERMINATION SETUP
01505	12 3114	27		ENTAL*ALPARM INITIAL AL INPUT PARAMETER
01506	52 3605	30		SLCL*K3 000001
01507	44 1523	31		STRAL*SIZE1 SAVE SIZE INDEX
01510	12 1530	32		ENTAL*SIZE4 SET UP MEMORY LIMITS
01511	14 1523	33		ADDAL*SIZE1

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REVISION

01512	44	1510	34		STRAL*SIZE6	
01513	12	1531	35		ENTAL*SIZE5	
01514	14	1523	36		ADDAL*SIZE1	
01515	44	1520	37		STRAL*SIZE7	
01516	12	1524	40	SIZE6	ENTAL*SIZE2	SET UP THE VALUE
01517	44	3102	41		STRAL*PAR1	OF UPPER LIMIT
01520	12	1526	42	SIZE7	ENTAL*SIZE3	SET UP THE MAIN MEMORY
01521	44	1737	43		STRAL*CHEK4	CHECKING SUBROUTINE
01522	34	1532	44		JP*CRANK	
01523	00	0000	45	SIZE1	0*0	
01524	00	0277	46	SIZE2	00*0277	
01525	00	0677	47		00*0677	
01526	34	1751	50	SIZE3	JP*CHEK5	
01527	02	1756	51		CMAL*CHEK1	
01530	12	1524	52	SIZE4	ENTAL*SIZE2	
01531	12	1526	53	SIZE5	ENTAL*SIZE3	
			54	CRANK	PROG*MUELLER*60CT _{on}	
01532	50	5020	55	CRANK	SKP*20	SET KEY 4 TO SUPRESS TYPEOUTS
01533	34	1535	56		JP*HEAD	NOT SET-TYPE OUT
01534	34	1546	57		JP*TRACK	
01535	30	1536	60	HEAD	TYPT*\$CR\$CONTROL MEMORY TEST	
01536	00	3115				
01537	76	4320				
01540	56	6462				
01541	20	5400				
01542	55	4555				
01543	20	6271				
01544	00	6445				
01545	63	6477				
01546	70	0001	61	TRACK	ENTALK*1	YES COUNT CYCLES
01547	14	1604	62		ADDAL*COUNT	UP DATE COUNT
01550	44	1604	63		STRAL*COUNT	
01551	02	1605	64		CMAL*NUMB	FINISHED 10 CYCLES
01552	63	1777	65		JPNOT*TEST	NO
01553	40	1604	66		CL*COUNT	YES CLEAR COUNT FOR NEW START
01554	{	5020	67		SKP*20	SET SKIP KEY 4 TO SUPRESS TYPE

01555 34 1557 70
 01556 34 1571 71
 01557 12 1606 72
 01560 63 1575 73

JP*LOK+2
 JP*PQXY
 ENTAL*BAER
 JPALNZ*RECYL

CHECK ERROR FLAG
 TYPEOUT RECYCLE

01561 30 1562 74
 01562 00 3115
 01563 76 2053
 01564 14 0045
 01565 56 4400
 01566 43 7143
 01567 54 4563
 01570 77 7777

TYPT*\$CR\$OK, END CYCLES

01571 50 5604 75
 01572 50 5004 76
 01573 55 1477 77
 01574 34 1546 100
 01575 30 1576 101
 01576 00 3115
 01577 76 6245
 01600 43 7143

PQXY

STOP*04 14
 SKP*04
 IJP*SIZE-1
 JP*TRACK

YES, SET STOP KEY FOR END OF TEST
 SET SKIP 2 TO STAY INTEST
 EXIT
 NOT SET

RECYL

TYPT*\$CR\$RECYCLE

01601 54 4577
 01602 40 1606 102
 01603 34 1571 103
 01604 00 0000 104
 01605 00 0013 105
 01606 00 0000 106
 01607 00 0000 110

COUNT

NUMB

BAER

ERROUT

ERROUT

CL*BAER
 JP*PQXY
 0*0
 00*13
 0*0
 PROG*CASEY*8JUNE64
 0*0

YES CLEAR ERROR FLAG

01610 72 1730 111
 01611 50 7202 112
 01612 50 7310 113
 01613 12 0002 114
 01614 75 3113 115
 01615 44 1732 116
 01616 50 7310 117
 01617 12 0040 120

STRICR*SF
 ENTICK*02
 ENTSR*10
 ENTAL*0002
 STRSR*WHERE
 STRAL*ERRT1
 ENTSR*10
 ENTAL*0040

SAVE ICR
 SET R TO 2

SAVE B2

SAVE OUTPUT BUFFERS

01620	75	3113	121
01621	44	1733	122
01622	50	7310	123
01623	12	0041	124
01624	75	3113	125
01625	44	1734	126
01626	30	1627	127
01627	00	3115	
01630	76	4562	
01631	62	2062	
01632	77	7777	
01633	30	1634	130
01634	00	3115	
01635	76	5441	
01636	63	6400	
01637	41	4444	
01640	62	4563	
01641	63	0021	
01642	63	6400	
01643	41	4444	
01644	62	4563	
01645	63	0043	
01646	20	6262	
01647	45	4364	
01650	00	5156	
01651	43	2062	
01652	62	4543	
01653	64	7777	
01654	70	7777	131
01655	44	1606	132
01656	30	1657	133
01657	00	3352	
01660	10	0076	
01661	60	3111	
01662	10	0000	
01663	10	0000	
01664	10	0000	

STRSR*WHERE
 STRAL*ERRT2
 ENTSR*10
 ENTAL*0041
 STRSR*WHERE
 STRAL*ERRT3

TYPT*\$CR\$ERROR

TYPT*\$CR\$LAST ADDRESS 1ST ADDRESS CORRECT INCORRECT

ENTALK*7777
 STRAL*BAER

ERROR SET
 ERROR FLAG

TYPC*\$CR\$*HERE* * * * * * * * * * * * * *

01665 10 0000
 01666 10 0000
 01667 10 0000
 01670 60 3112
 01671 10 0000
 01672 10 0000
 01673 10 0000

01674 10 0000
 01675 10 0000
 01676 10 0000
 01677 10 0000
 01700 10 0000
 01701 10 0000
 01702 00 0000
 01703 30 1704

134

TYPC*DIP* * * *DIP+1

01704 00 3352
 01705 60 3107
 01706 10 0000
 01707 10 0000
 01710 10 0000
 01711 60 3110
 01712 00 0000
 01713 50 5604

135

STOP*04

STOP AFTER TYPEOUT

01714 12 1732 136
 01715 50 7310 137
 01716 44 0002 140
 01717 75 3113 141
 01720 12 1733 142
 01721 50 7310 143
 01722 44 0040 144
 01723 75 3113 145

ENTAL*ERRT1
 ENTSTR*10
 STRAL*0002
 STRSR*WHERE
 ENAL*ERRT2
 ENTSTR*10
 STRAL*0040
 STRSR*WHERE

RESTORE B2 AND OUTPUT BUFFERS

01724 12 1734 146
 01725 50 7310 147
 01726 44 0041 150
 01727 75 3113 151
 01730 50 7200 152

ENTAL*ERRT3
 ENTSTR*10
 STRAL*0041
 STRSR*WHERE
 ENTICK*0

RESTORE B REG

SF

01731	55	1607	153		IJP*ERROUT	BACK
01732	00	0000	154	ERRT1	0*0	
01733	00	0000	155	ERRT2	0*0	
01734	00	0000	156	ERRT3	0*0	
			157	CHEK	PROG*MUELLER*60CT6	
01735	00	0000	160	CHEK	0*0	ENTRANCE
01736	12	3101	161		ENTAL*PAR	ENTER INDEX VALUE
01737	02	1756	162	CHEK4	CMAL*CHEK1	IS PAR EQUAL TO 577
01740	63	1744	163		JPNOT*LOK+4	NO
01741	71	7677	164		ADDALK*7677	YES DECREMENT PAR BY 100
01742	44	3101	165		STRAL*PAR	RESTORE NEW INDEX
01743	55	1735	166		IJP*CHEK	EXIT
01744	02	1757	167		CMAL*CHEK2	IS PAR EQUAL TO 377
01745	63	1751	170		JPNOT*LOK+4	NO
01746	71	7677	171		ADDALK*7677	YES DECREMENT PAR BY 100
01747	44	3101	172		STRAL*PAR	RESTORE NEW INDEX
01750	55	1735	173		IJP*CHEK	EXIT
01751	02	1760	174	CHEK5	CMAL*CHEK3	IS PAR EQUAL TO 177
01752	63	1755	175		JPNOT*LOK+3	NO
01753	71	7677	176		ADDALK*7677	YES DECREMENT PAR BY 100
01754	44	3101	177		STRAL*PAR	RESTORE NEW INDEX
01755	55	1735	200		IJP*CHEK	EXIT
01756	00	0577	201	CHEK1	00*0577	
01757	00	0377	202	CHEK2	00*0377	
01760	00	0177	203	CHEK3	00*0177	
01761	00	0000	204	PROOF	0*0	ENTRANCE
01762	12	3101	205		ENTAL*PAR	ENTER INDEX COUNT
01763	44	3112	206		STRAL*THRE	SAVE INDEX COUNT
01764	57	3101	207		ISK*PAR	KEEP CHECKING
01765	34	1770	210		JP*LOK+3	GO ON
01766	76	1607	211		RJP*ERROUT	ALL DONE
01767	55	1761	212		IJP*PROOF	GO BACK TO SR
01770	76	1735	213		RJP*CHEK	CHECK FOR WIRE AND MAIN MEMORY
01771	12	3101	214		ENTAL*PAR	ENTER CELL
01772	74	1773	215		STRADR*LOK+1	CONTENTS IN
01773	1	0000	216		ENTAL*0	AL

01774 02 3107 217
 01775 61 1766 220
 01776 34 1762 221

CMAL*DIP
 JPEQ*PROOF+5
 JP*PROOF+1

IS IT CORRECT
 YES TYPEOUT ERRORS
 NO CONTINUE PROOF SR

01777 12 3102 222
 02000 44 3101 223
 02001 12 3101 224
 02002 74 2003 225
 02003 40 0000 226
 02004 57 3101 227
 02005 34 2007 228

TEST
 TEST

PROG*MUELLER*70CT6
 ENTAL*PAR1
 STRAL*PAR
 ENTAL*PAR
 STRADR*LOK+1
 CL*0
 ISK*PAR
 JP*H00

SET UP
 INDEX COUNT
 SET UP ADDRESS
 TO BE CLEARED
 SET ADDRESS TO ZERO
 ALL SET TO ZERO
 NO CONTINUE

02006 34 2011 232
 02007 76 1735 233
 02010 34 2001 234
 02011 12 3102 235
 02012 44 3101 236
 02013 12 3101 237
 02014 74 2015 238
 02015 12 0000 239

H00

HOCK

JP*HOCK
 RJP*CHEK
 JP*TEST+2
 ENTAL*PAR1
 STRAL*PAR
 ENTAL*PAR
 STRADR*LOK+1
 ENTAL*0

YES CHECK FOR ZERO HOLD
 CHECK FOR WIRE AND MAIN MEMORY
 UP DATE ADDRESS
 SET UP
 INDEX COUNT
 SET UP ADDRESS
 TO BE CLEARED
 ENTER ADDRESS INTO AL

02016 63 2024 242
 02017 57 3101 243
 02020 34 2022 244
 02021 34 2041 245
 02022 76 1735 246
 02023 34 2013 247
 02024 10 3103 248
 02025 46 3107 249

HOCK1

JPALNZ*HOCK1
 ISK*PAR
 JP*LOK+2
 JP*HD1
 RJP*CHEK
 JP*HOCK+2
 ENTAU*PAT
 STRAU*DIP

CORRECT NO GO TO ERROR DISPLAY
 ALL CHECKED
 NO CONTINUE
 YES GO TO NEXT SR
 CHECK FOR WIRED AND MAIN MEMORY
 UPDATE ADDRESS
 ERROR CORRECT IN AU
 SAVE FOR TYPEOUT

02026 44 3110 252
 02027 50 5601 253
 02030 12 3101 254
 02031 44 3111 255
 02032 10 3103 256
 02033 50 5601 257
 02034 50 5020 258
 02035 76 1761 259

STRAL*DIP+1
 STOP*01
 ENTAL*PAR
 STRAL*HERE
 ENTAU*PAT
 STOP*01
 SKP*20
 RJP*PROOF

SAVE FOR TYPEOUT
 STOP KEY 0 FOR ERROR DISPLAY
 SET FAILING ADDRESS IN AL
 SAVE ADDRESS
 000000
 DISPLAY ADDRESS IN AL
 IS TYPEOUT SUPPRESSED
 NO GO TO ERROR TYPEOUT

02036 50 5001 262

SKP*01

SET SKIP KEY 0 TO REPEAT TEST

02037	34	2017	263		JP*HOCK+6	NOT SET CONTINUE TEST
02040	34	1777	264		JP*TEST	SET RECYCLE SR
			265	HD1	PRUG*MUELLER*70CT6,,	
02041	12	3102	266	HD1	ENTAL*PAR1	SET UP
02042	44	3101	267		STRAL*PAR	INDEX COUNT
02043	12	3101	270		ENTAL*PAR	SET UP ADDRESS
02044	74	2046	271		STRADR*LOK+2	TO BE SET TO ONES
02045	12	3104	272		ENTAL*PAT1	ENTER PATTERN
02046	44	0000	273		STRAL*0	STORE ALL ONES PER CELL COUNT
02047	57	3101	274		ISK*PAR	ALL SET TO ONES
02050	34	2052	275		JP*HLD1	NO CONTINUE
02051	34	2054	276		JP*HICK	YES CHECK LOAD
02052	76	1735	277	HLD1	RJP*CHEK	CHECK FOR WIRE AND MAIN MEMORY
02053	34	2043	300		JP*HD1+2	UPDATE ADDRESS
02054	12	3102	301	HICK	ENTAL*PAR1	SET UP
02055	44	3101	302		STRAL*PAR	INDEX COUNT
02056	12	3101	303		ENTAL*PAR	SET UP ADDRESS
02057	74	2060	304		STRADR*LOK+1	TO BE SET TO ONES
02060	12	0000	305		ENTAL*0	ENTER ADDRESS INTO AL
02061	02	3104	306		CMAL*PAT1	CHECK FOR CORRECT LOAD
02062	63	2070	307		JPNOT*HICK1	INCORRECT GO TO ERROR DISPLAY
02063	57	3101	310		ISK*PAR	CORRECT ARE ALL CHECKED
02064	34	2066	311		JP*LOK+2	NO CONTINUE
02065	34	2104	312		JP*HALT	YES GO TO NEXT SR
02066	76	1735	313		RJP*CHEK	CHECK FOR WIRED AND MAIN MEMORY
02067	34	2056	314		JP*HICK+2	UPDATE ADDRESS
02070	10	3104	315	HICK1	ENTAU*PAT1	ERROR CORRECT IN AU
02071	46	3107	316		STRAU*DIP	SAVE FOR TYPEOUT
02072	44	3110	317		STRAL*DIP+1	SAVE FOR TYPEOUT
02073	50	5601	320		STOP*01	STOP KEY 0 FOR ERROR DISPLAY
02074	12	3101	321		ENTAL*PAR	SET FATLING ADDRESS IN AL
02075	44	3111	322		STRAL*HERE	SAVE ADDRESS
02076	50	5601	323		STUP*01	DISPLAY ADDRESS IN AL
02077	50	5020	324		SKP*20	IS TYPEOUT SUPPRESSED
02100	76	1761	325		RJP*PROOF	NO GO TO ERROR TYPEOUT
02101	50	5001	326		SKP*01	SET SKIP KEY 0 TO REPEAT TEST
02102	3	0663	327		JP*HICK+7	NOT SET CONTINUE TEST

02103	34	2041	330		JP*HD1	SET RECYCLE SR
			331	HALT	PROG*MUELLER*70CT ₆₀	
02104	12	3102	332	HALT	ENTAL*PAR1	
02105	44	3101	333		STRAL*PAR	
02106	12	3101	334		ENTAL*PAR	
02107	74	2111	335		STRADR*LOK+2	
02110	12	3105	336		ENTAL*PAL1	
02111	44	0000	337		STRAL*0	
02112	57	3101	340		ISK*PAR	
02113	34	2115	341		JP*ALT1	
02114	34	2117	342		JP*ATICK	
02115	76	1735	343	ALT1	RJP*CHEK	
02116	34	2106	344		JP*HALT+2	
02117	12	3102	345	ATICK	ENTAL*PAR1	
02120	44	3101	346		STRAL*PAR	
02121	12	3101	347		ENTAL*PAR	
02122	74	2123	350		STRADR*LOK+1	
02123	12	0000	351		ENTAL*0	
02124	02	3105	352		CMAL*PAL1	
02125	63	2133	353		JPNOT*ATICK1	
02126	57	3101	354		ISK*PAR	
02127	34	2131	355		JP*LOK+2	
02130	34	2147	356		JP*HALT0	
02131	76	1735	357		RJP*CHEK	
02132	34	2121	360		JP*ATICK+2	
02133	10	3105	361	ATICK1	ENTAU*PAL1	
02134	46	3107	362		STRAU*DIP	
02135	44	3110	363		STRAL*DIP+1	
02136	50	5601	364		STOP*01	
02137	12	3101	365		ENTAL*PAR	
02140	44	3111	366		STRAL*HERE	
02141	50	5601	367		STOP*01	
02142	50	5020	370		SKP*20	
02143	76	1761	371		RJP*PROOF	
02144	50	5001	372		SKP*01	
02145	34	2126	373		JP*ATICK+7	

02146	34	2104	374		JP*HALT
			375	HALTO	PRUG*MUELLER*70CT6..
02147	12	3102	376	HALTO	ENTAL*PAR1
02150	44	3101	377		STRAL*PAR
02151	12	3101	400		ENTAL*PAR
02152	74	2154	401		STRADR*L0K+2
02153	12	3106	402		ENTAL*PALO
02154	44	0000	403		STRAL*U
02155	57	3101	404		ISK*PAR
02156	34	2160	405		JP*ALTO
02157	34	2162	406		JP*ATOCK
02160	76	1735	407	ALTO	RJP*CHEK
02161	34	2151	410		JP*HALTO+2
02162	12	3102	411	ATOCK	ENTAL*PAR1
02163	44	3101	412		STRAL*PAR
02164	12	3101	413		ENTAL*PAR
02165	74	2166	414		STRADR*L0K+1
02166	12	0000	415		ENTAL*0
02167	02	3106	416		CMAL*PALO
02170	63	2176	417		JPN0T*ATOCK1
02171	57	3101	420		ISK*PAR
02172	34	2174	421		JP*L0K+2
02173	34	2212	422		JP*WP1
02174	76	1735	423		RJP*CHEK
02175	34	2164	424		JP*ATOCK+2
02176	10	3106	425	ATOCK1	ENTAU*PALO
02177	46	3107	426		STRAU*DIP
02200	44	3110	427		STRAL*DIP+1
02201	50	5601	430		STOP*01
02202	12	3101	431		ENTAL*PAR
02203	44	3111	432		STRAL*HERE
02204	50	5601	433		STOP*01
02205	50	5020	434		SKP*20
02206	76	1761	435		RJP*PR00F
02207	50	5001	436		SKP*01
02210	()	2171	437		JP*ATOCK+7

02211	34	2147	440		JP*HALTO	
			441	WP1	PROG*MUELLER*70CT600	
02212	10	2243	442	WP1	ENTAU*WP5	MASK TO AU- WORST PATTERN
02213	12	3102	443		ENTAL*PAR1	SET UP
02214	44	3101	444		STRAL*PAR	INDEX COUNT
02215	12	3101	445	WP2	ENTAL*PAR	ADDRESS TO AL
02216	50	5400	446		SKPODD*00	IS ADDRESS PARITY ODD
02217	34	2221	447		JP*WP3	NO-WRITE PATTERN
02220	34	2232	450		JP*WP4	YES WRITE COMP PATTERN
02221	12	3101	451	WP3	ENTAL*PAR	SET UP
02222	74	2224	452		STRADR*LOK+2	ADDRESS
02223	12	2345	453		ENTAL*CKWP13	WRITE PATTERN
02224	44	0000	454		STRAL*0	
02225	57	3101	455		ISK*PAR	IS WRITE COMPLETED
02226	34	2230	456		JP*LOK+2	NO
02227	34	2244	457		JP*CKWP	YES-CHECK PATTERN
02230	76	1735	460		RJP*CHEK	CHEK FOR WIRED AND MAIN MEMORY
02231	34	2215	461		JP*WP2	CONTINUE
02232	12	3101	462	WP4	ENTAL*PAR	SET UP
02233	74	2235	463		STRADR*LOK+2	ADDRESS
02234	12	2346	464		ENTAL*CKWP14	WRITE COMP PATTERN
02235	44	0000	465		STRAL*0	
02236	57	3101	466		ISK*PAR	IS WRITE COMPLETED
02237	34	2241	467		JP*LOK+2	NO
02240	34	2244	470		JP*CKWP	YES-CHECK PATTERN
02241	76	1735	471		RJP*CHEK	CHEK FOR WIRED AND MAIN MEMORY
02242	34	2215	472		JP*WP2	CONTINUE
02243	00	0100	473	WP5	00*0100	PARITY MASK
02244	12	3102	474	CKWP	ENTAL*PAR1	SET UP
02245	44	3101	475		STRAL*PAR	INDEX COUNT
02246	10	2243	476	CKWP1	ENTAU*WP5	MASK TO AU
02247	12	3101	477		ENTAL*PAR	ADDRESS TO AL
02250	50	5400	500		SKPODD*00	IS ADDRESS PARITY ODD
02251	34	2253	501		JP*CKWP2	NO
02252	34	2270	502		JP*CKWP4	YES
02253	12	3101	503	CKWP2	ENTAL*PAR	SET UP

02254	74	2255	504		STRADR*LOK+1	ADDRESS
02255	12	0000	505		ENTAL*0	ENTER ADDRESS INTO AL
02256	02	2345	506		CMAL*CKWP13	IS PATTERN CORRECT
02257	61	2261	507		JPEQ*CKWP3	YES
02260	34	2305	510		JP*AIR	NO
02261	57	3101	511	CKWP3	ISK*PAR	IS CHECK COMPLETED
02262	34	2264	512		JP*LOK+2	NO
02263	34	2266	513		JP*LOK+3	YES
02264	76	1735	514		RJP*CHEK	CHECK FOR WIRED AND MAIN MEMORY
02265	34	2246	515		JP*CKWP1	CONTINUE CHECK
02266	76	3050	516		RJP*FLUSH1	FLUSH CONTROL MEMORY
02267	34	2347	517		JP*CWP1	GO TO NEXT SR
02270	12	3101	520	CKWP4	ENTAL*PAR	SET UP
02271	74	2272	521		STRADR*LOK+1	ADDRESS
02272	12	0000	522		ENTAL*0	ENTER ADDRESS INTO AL
02273	02	2346	523		CMAL*CKWP14	IS PATTERN CORRECT
02274	61	2276	524		JPEQ*CKWP5	YES
02275	34	2325	525		JP*AIR1	NO
02276	57	3101	526	CKWP5	ISK*PAR	IS CHECK COMPLETED
02277	34	2301	527		JP*LOK+2	NO
02300	34	2303	530		JP*LOK+3	YES
02301	76	1735	531		RJP*CHEK	CHECK FOR WIRED AND MAIN MEMORY
02302	34	2246	532		JP*CKWP1	CONTINUE CHECK
02303	76	3050	533		RJP*FLUSH1	FLUSH CONTROL MEMORY
02304	34	2347	534		JP*CWP1	GO TO NEXT SR
			535	AIR	PROG*MUELLER*70CT6..	
02305	12	3101	536	AIR	ENTAL*PAR	SET UP INCORRECT
02306	74	2307	537		STRADR*LOK+1	ADDRESS
02307	12	0000	540		ENTAL*0	INCORRECT INTO AL
02310	10	2345	541		ENTAU*CKWP13	CORRECT INTO AU
02311	46	3107	542		STRAU*DIP	SAVE FOR TYPEOUT
02312	44	3110	543		STRAL*DIP+1	SAVE FOR TYPEOUT
02313	50	5601	544		STOP*01	ERROR STOP KEY 0 SET
02314	12	3101	545		ENTAL*PAR	FAILING ADDRESS INTO AL
02315	44	3111	546		STRAL*HERE	SAVE FOR TYPEOUT
02316	44	3112	547		STRAL*THRE	SAVE FOR TYPEOUT

02317	50	5601	550		STOP*01	SET STOP KEY 0 TO DISPLAY ADDRESS IN AL
02320	50	5020	551		SKP*20	SET SKIP KEY 4 TO SUPPRESS TYPEOUT
02321	76	1607	552		RJP*ERRRUT	ERROR TYPEOUT
02322	50	5001	553		SKP*01	SKIP KEY 0 TO REPEAT TEST
02323	34	2261	554		JP*CKWP3	NOT SET CONTINUE
02324	34	2212	555		JP*WP1	SET REPEAT
02325	12	3101	556	AIR1	ENTAL*PAR	SET UP INCORRECT
02326	74	2327	557		STRADR*LOK+1	ADDRESS
02327	12	0000	560		ENTAL*0	INCORRECT INTO AL
02330	10	2346	561		ENTAU*CKWP14	CORRECT INTO AU
02331	46	3107	562		STRAU*DIP	SAVE FOR TYPEOUT
02332	44	3110	563		STRAL*DIP+1	SAVE FOR TYPEOUT
02333	50	5601	564		STOP*01	ERROR STOP KEY 0 SET
02334	12	3101	565		ENTAL*PAR	FAILING ADDRESS INTO AL
02335	44	3111	566		STRAL*HERE	SAVE FOR TYPEOUT
02336	44	3112	567		STRAL*THERE	SAVE FOR TYPEOUT
02337	50	5601	570		STOP*01	SET STOP KEY 0 TO DISPLAY ADDRESS
02340	50	5020	571		SKP*20	SET SKIP KEY 4 TO SUPPRESS TYPEOUT
02341	76	1607	572		RJP*ERRRUT	ERROR TYPEOUT
02342	50	5001	573		SKP*01	SKIP KEY 0 TO REPEAT TEST
02343	34	2276	574		JP*CKWPS	NOT SET CONTINUE
02344	34	2212	575		JP*WP1	SET REPEAT
02345	00	0000	576	CKWP13	00*0000	
02346	77	7777	577	CKWP14	77*7777	
			600	CWP1	PRUG*MUELLER*80CT6.	
02347	10	2243	601	CWP1	ENTAU*WP5	
02350	12	3102	602		ENTAL*PAR1	
02351	44	3101	603		STRAL*PAR	
02352	12	3101	604	CWP2	ENTAL*PAR	
02353	50	5500	605		SKPEVN*00	
02354	34	2356	606		JP*CWP3	
02355	34	2367	607		JP*CWP4	
02356	12	3101	610	CWP3	ENTAL*PAR	
02357	74	2361	611		STRADR*LOK+2	
02360	12	2345	612		ENTAL*CKWP13	
02361	44	0000	613		STRAL*0	
02362	57	3101	614		ISK*PAR	

THIS IS THE COMPLEMENTED
WORST PATTERN TEST

02363	34	2365	615		JP*LOK+2
02364	34	2400	616		JP*CCKWP
02365	76	1735	617		RJP*CHEK
02366	34	2352	620		JP*CWP2
02367	12	3101	621	CKP4	ENTAL*PAR
02370	74	2372	622		STRADR*LOK+2
02371	12	2346	623		ENTAL*CKWP14
02372	44	0000	624		STRAL*0
02373	57	3101	625		ISK*PAR
02374	34	2376	626		JP*LOK+2
02375	34	2400	627		JP*CCKWP
02376	76	1735	630		RJP*CHEK
02377	34	2352	631		JP*CWP2
02400	12	3102	632	CCKWP	ENTAL*PAR1
02401	44	3101	633		STRAL*PAR
02402	10	2243	634	CCKWP1	ENTAU*WP5
02403	12	3101	635		ENTAL*PAR
02404	50	5500	636		SRPEVN*00
02405	34	2407	637		JP*CCKWP2
02406	34	2424	640		JP*CCKWP4
02407	12	3101	641	CCKWP2	ENTAL*PAR
02410	74	2411	642		STRADR*LOK+1
02411	12	0000	643		ENTAL*0
02412	02	2345	644		CNAL*CKWP13
02413	61	2415	645		JPE0*CCKWP3
02414	34	2441	646		JP*CAIR
02415	57	3101	647	CCKWP3	ISK*PAR
02416	34	2420	650		JP*LOK+2
02417	34	2422	651		JF*LOK+3
02420	76	1735	652		RJP*CHEK
02421	34	2402	653		JP*CCKWP1
02422	76	3050	654		RJP*FLUSH1
02423	34	2501	655		JP*RW
02424	12	3101	656	CCKWP4	ENTAL*PAR
02425	74	2426	657		STRADR*LOK+1
02426	1	0000	660		ENTAL*0

02427	02	2346	661		CNAL*CKWP14
02430	61	2432	662		JPEQ*CCKWP5
02431	34	2461	663		JP*CAIR1
02432	57	3101	664	CCKWP5	ISK*PAR
02433	34	2435	665		JP*LOK+2
02434	34	2437	666		JP*LOK+3
02435	76	1735	667		RJP*CHEK
02436	34	2402	670		JP*CCKWP1
02437	76	3050	671		RJP*FLUSH1
02440	34	2501	672		JP*RW
			673	CAIR	PROG*MUELLER*70CT6,,
02441	12	3101	674	CAIR	ENTAL*PAR
02442	74	2443	675		STRADR*LOK+1
02443	12	0000	676		ENTAL*0
02444	10	2345	677		ENTAU*CKWP13
02445	46	3107	700		STRAU*DIP
02446	44	3110	701		STRAL*DIP+1
02447	50	5601	702		STOP*01
02450	12	3101	703		ENTAL*PAR
02451	44	3111	704		STRAL*HERE
02452	44	3112	705		STRAL*THREE
02453	50	5601	706		STOP*01
02454	50	5020	707		SKP*20
02455	76	1607	710		RJP*ERR0UT
02456	50	5001	711		SKP*01
02457	34	2415	712		JP*CCKWP3
02460	34	2347	713		JP*CWP1
02461	12	3101	714	CAIR1	ENTAL*PAR
02462	74	2463	715		STRADR*LOK+1
02463	12	0000	716		ENTAL*0
02464	10	2346	717		ENTAU*CKWP14
02465	46	3107	720		STRAU*DIP
02466	44	3110	721		STRAL*DIP+1
02467	50	5601	722		STOP*01
02470	12	3101	723		ENTAL*PAR
02471	44	3111	724		STRAL*HERE

02472	44	3112	725	STRAL*THRE	
02473	50	5601	726	STOP*01	
02474	50	5020	727	SKP*20	
02475	76	1607	730	RJP*ERR0UT	
02476	50	5001	731	SKP*01	
02477	34	2432	732	JP*CCKWF5	
02500	34	2347	733	JP*CWP1	
			734	PROG*MUELLER*80CT6	
02501	12	2605	735	ENTAL*RW30	PRESTORE IMAGE
02502	44	2513	736	STRAL*RW21	STORAGE INSTRUCTIONS
02503	12	2606	737	ENTAL*RW31	
02504	44	2547	740	STRAL*RW22	
02505	12	3102	741	ENTAL*PAR1	SET UP INDEX COUNT
02506	44	3101	742	STRAL*PAR	
02507	12	3101	743	ENTAL*PAR	SET UP ADDRESS TO
02510	74	2512	744	STRADR*LOK+2	BE LOADED
02511	76	2607	745	RJP*RAH	GENERATE RANDOM NUMBER
02512	44	0000	746	STRAL*0	STORE PATTERN
02513	44	7000	747	STRAL*IMAGE	STORE IMAGE
02514	12	2513	750	ENTAL*RW21	ADVANCE IMAGE
02515	71	0001	751	ADDALK*0001	ADDRESS
02516	44	2513	752	STRAL*RW21	
02517	57	3101	753	ISK*PAR	IS PATTERN WRITTEN
02520	34	2522	754	JP*LOK+2	NO
02521	34	2524	755	JP*LOK+3	YES
02522	76	1735	756	RJP*CHK	CHECK FOR WIRED AND CONTROL MEMORY
02523	34	2507	757	JP*RW2	CONTINUE
02524	12	3102	760	ENTAL*PAR1	READ EACH WORD IN
02525	44	3101	761	STRAL*PAR	PATTERN 50 TIMES
02526	12	3101	762	ENTAL*PAR	SET UP ADDRESS
02527	74	2532	763	STRADR*RW4	TO BE READ
02530	12	2603	764	ENTAL*RW10	PRESTORE WORD READ INDEX
02531	44	2604	765	STRAL*RW11	
02532	12	0000	766	ENTAL*0	READ WORD
02533	57	2604	767	ISK*RW11	IS WORD READ 50 TIMES
02534	7	2532	770	JP*RW4	NO CONTINUE TO READ

02535 57 3101 771
 02536 34 2540 772
 02537 34 2542 773
 02540 76 1735 774
 02541 34 2526 775

ISK*PAR
 JP*LOK+2
 JP*LOK+3
 RJP*CHEK
 JP*RW3

ALL WORDS READ 50 TIMES
 NO
 YES-VERIFY
 CONTINUE

02542 12 3102 776
 02543 44 3101 777
 02544 12 3101 1000
 02545 74 2546 1001
 02546 12 0000 1002
 02547 02 7000 1003
 02550 63 2561 1004
 02551 12 2547 1005

RW5

RW6

RW22

ENTAL*PAR1
 STRAL*PAR
 EN TAL*PAR
 STRADR*RW6
 ENTAL*0
 CMAL*IMAGE
 JPNOT*RW20
 ENTAL*RW22

VERIFY NOW
 SET UP INDEX COUNT
 SET UP ADDRESS TO VERIFY

ENTER WORD
 IS WORD CORRECT
 NO
 YES ADVANCE

02552 71 0001 1006
 02553 44 2547 1007
 02554 57 3101 1010
 02555 34 2557 1011
 02556 34 2622 1012
 02557 76 1735 1013
 02560 34 2544 1014
 02561 12 2547 1015

RW7

RW20

ADDALK*0001
 STRAL*RW22
 ISK*PAR
 JP*LOK+2
 JP*LCON
 RJP*CHEK
 JP*RW5
 ENTAL*RW22

COMPARISON ADDRESS

IS PATTERN COMPLETE
 NO
 YES

CONTINUE
 ERROR DISPLAY

02562 74 2563 1016
 02563 10 0000 1017
 02564 46 3107 1020
 02565 12 3101 1021
 02566 74 2567 1022
 02567 12 0000 1023
 02570 44 3110 1024
 02571 50 5601 1025

RW23

STRADR*RW23
 ENTAU*0
 STRAU*DIP
 ENTAL*PAR
 STRADR*LOK+1
 ENTAL*0
 STRAL*DIP+1
 STOP*01

CORRECT INTO AU
 SAVE FOR TYPEOUT

INCORRECT INTO AL
 SAVE FOR TYPEOUT
 SET STOP FOR ERROR DISPLAY

02572 12 3101 1026
 02573 44 3111 1027
 02574 44 3112 1030
 02575 50 5601 1031
 02576 50 5020 1032
 02577 76 1607 1033
 02600 50 5001 1034
 02601 34 2551 1035

ENTAL*PAR
 STRAL*HERE
 STRAL*THREE
 STOP*01
 SRP*20
 RJP*ERROUT
 SRP*01
 JP*RW7-3

FAILING ADDRESS INTO AL
 SAVE FOR TYPEOUT
 SAVE FOR TYPEOUT
 SET STOP 0 TO DISPLAY FAILING ADDRESS
 SET SKIP 4 TO SUPPRESS TYPEOUT
 NOT SET TYPEOUT
 SET SKIP 0 TO REPEAT SR

SHEET 753
 001-10163

REVISION

02602	34	2501	1036		JP*RW
02603	00	0050	1037	RW10	00*0050
02604	00	0050	1040	RW11	00*0050
02605	44	7000	1041	RW30	STRAL*IMAGE
02606	02	7000	1042	RW31	CMAL*IMAGE
			1043	RAN	PR0G*CASEY*29JUNE6.

SET REPEAT SR

02607	34	0000	1044	RAN	JP*0
02610	12	2620	1045	RAN1	ENTAL*RAN2
02611	24	2620	1046		MULAL*RAN2
02612	26	2621	1047		DIVA*RAN3
02613	62	2616	1050		JPAUNZ*RAN4
02614	44	2620	1051		STRAL*RAN2
02615	55	2607	1052		IJP*RAN
02616	46	2620	1053	RAN4	STRAU*RAN2

RANDOM NUMBER GENERATOR

02617	55	2607	1054		IJP*RAN
02620	00	0703	1055	RAN2	00*0703
02621	37	7775	1056	RAN3	37*7775
02622	40	3047	1057	LCON	CL*LPAT
02623	70	0020	1060	LCONA	ENTALK*20
02624	44	3045	1061		STRAL*LACTR
02625	40	3046	1062	LCONB	CL*LOOP
02626	76	3022	1063	LCONC	RJP*LINIT

INIT PATTERN STORE=0

INIT ADDR CTR=020
 INIT LOOP CTR=0
 INIT B,PICK UP INIT ADDR

02627	74	2631	1064		STRADR*LCOND
02630	12	3047	1065		ENTAL*LPAT
02631	45	0000	1066	LCOND	STRALB*0000
02632	56	3035	1067		BSK*L77
02633	34	2631	1070		JP*LCOND
02634	12	3046	1071		ENTAL*LOOP
02635	10	1523	1072		ENTAU*SIZE1
02636	62	2642	1073		JPAUNZ*LCONC

SET ADDR FOR USE

STORE ZERO OR -ZERO
 ALL CELLS IN SEGMENT SET
 NO
 YES-PICK UP LOOP CTR
 128 WORD CONTROL
 NO

02637	02	3032	1074		CMAL*L01
02640	63	2644	1075		JPHOT*LCONC1
02641	34	2647	1076		JP*LCONF
02642	02	3033	1077	LCONC	CMAL*L03
02643	61	2647	1100		JPEQ*LCONF
02644)	0001	1101	LCONC1	ADDALK*1

YES-LOOP CTR=1
 NO
 YES-DONE STORING
 LOOP CTR=3
 YES-DONE STORING

02645	44	3046	1102		STRAL*LOOP	INCR LOOP CTR
02646	34	2626	1103		JP*LCONC	STORE INTO NEXT SEGMENT
02647	32	3045	1104	LCONF	ENTB*LACTR	SET B-INDEX WITH ADDR CTR
02650	40	3046	1105		CL*LOOP	INIT LOOP CTR=0
02651	10	3041	1106		ENTAU*L677	
02652	47	0000	1107	LCONG	STRAUB*0000	STORE NEW PATTERN
02653	12	3046	1110		ENTAL*LOOP	
02654	02	3034	1111		CMAL*L9	DONE 10 TIMES YET
02655	61	2661	1112		JPEQ*LCONH	YES-ENUF
02656	71	0001	1113		ADDALK*1	
02657	44	3046	1114		STRAL*LOOP	INCR LOOP CTR
02660	34	2652	1115		JF*LCONG	
02661	12	3047	1116	LCONH	ENTAL*LPAT	
02662	45	0000	1117		STRALB*0000	STORE ORIG PATTERN AGAIN
02663	40	3046	1120		CL*LOOP	INIT LOOP CTR=0
02664	76	3022	1121	LCONI	RJP*LIMIT	INIT B,PICK UP INIT ADDR
02665	74	2667	1122		STRADR*LCONJ	SET ADDR FOR USE
02666	74	2677	1123		STRADR*LCONK	SET FOR POSSIBLE ERROR USE ALSO
02667	13	0000	1124	LCONJ	ENTALB*0000	PICK UP CELL VALUE
02670	02	3047	1125		CMAL*LPAT	SAME AS PATTERN STORED
02671	61	2754	1126		JPEQ*LCONM	YES
02672	10	3047	1127		ENTAU*LPAT	CORRECT DATA TO AU
02673	46	3043	1130		STRAU*LCORR	
02674	44	3044	1131		STRAL*LICORR	SAVE ADDR FOR TYPEOUT
02675	50	5601	1132		STOP*01	STOP TO DISPLAY IF KEY 0
02676	42	3042	1133		STRB*LADD	SAVE ADDR BIAS
02677	70	0000	1134	LCONK	ENTALK*0000	BASE ADDR OF SEGMENT
02700	14	3042	1135		ADDAL*LADD	PLUS BIAS TO GET TRUE ADDR
02701	44	3042	1136		STRAL*LADD	SAVE ADDR FOR TYPEOUT
02702	50	5601	1137		STOP*01	STOP TO DISPLAY IF KEY 0
02703	50	5020	1140		SKP*020	SKIP 4-SET
02704	34	2706	1141		JP*LOK+2	NO
02705	34	2751	1142		JP*LCONL	YES-SUPPRESS TYPEOUT
02706	44	1606	1143		STRAL*BAER	SET ERROR FLAG WITH ADDR(NEVER 0)
02707	30	2710	1144		TYPT*\$CR\$ERROR\$CR\$	
02710	00	3115				

02711 76 4562
02712 62 2062

02713 76 4144
02714 44 6245
02715 63 6335
02716 77 7777
02717 30 2720
02720 00 3352
02721 60 3042
02722 00 0000

1145

TPC*LADD

02723 30 2724
02724 00 3115
02725 00 0000
02726 43 2062
02727 62 4543
02730 64 3577
02731 30 2732
02732 00 3352

1146

TYPT* CORRECT=

02733 60 3043
02734 00 0000
02735 30 2736
02736 00 3115
02737 00 0000
02740 51 5643
02741 20 6262
02742 45 4364

1150

TYPT* INCORRECT=

02743 35 7777
02744 30 2745
02745 00 3352
02746 60 3044
02747 00 0000
02750 50 5604
02751 50 5001
02752 34 2754

1151

TPC*L1CORR

1152

STOP*04

1153

SKP*01

1154

JP*L0K+2

LCONL

02753 34 2622
02754 30 3035

1155

JP*LCON

1156

LCONM

BSK*L77

STOP FF TYPEOUT IF KEY 2
SKIP 0 SET
NO

YES-RECYCLE TEST
ALL CELLS IN SEGMENT CHECKED

02755	34	2667	1157	JP*LCONJ	NO
02756	12	3046	1160	ENTAL*LOOP	YES-PICK UP LOOP CTR
02757	10	1523	1161	ENTAU*SIZE1	128 WORD CONTROL
02760	62	2764	1162	JPAUNZ*LCONN	NO
02761	02	3032	1163	CMAL*L01	YES-LOOP CTR=1
02762	63	2766	1164	JPNOT*LCONN1	NO
02763	34	2771	1165	JP*LCONO	YES-DONE CHECKING
02764	02	3033	1166	LCONN CMAL*L03	LOOP CTR=3
02765	61	2771	1167	JPEQ*LCONO	YES-DONE CHECKING
02766	71	0001	1170	LCONN1 ADDALK*1	
02767	44	3046	1171	STRAL*LOOP	INCR LOOP CTR
02770	34	2664	1172	JP*LCONI	CHECK NEXT SEGMENT
02771	12	3045	1173	LCONO ENTAL*LACTR	ADDRESS COUNTER
02772	02	3035	1174	CMAL*L77	END OF SEGMENT 1
02773	63	2776	1175	JPNOT*LCON01	NO
02774	70	0200	1176	ENTALK*200	YES-ADDR 200 STARTS SEGM 2
02775	34	3013	1177	JP*LCON04	
02776	02	3037	1200	LCON01 CMAL*L277	END OF SEGMENT 2
02777	63	3004	1201	JPNOT*LCON02	NO
03000	12	1523	1202	ENTAL*SIZE1	YES-128 WORD CONTROL
03001	61	3015	1203	JPALZ*LCONP	YES-DONE WITH THIS PATTERN
03002	70	0400	1204	ENTALK*400	NO-ADDR 400 STARTS SEGM 3
03003	34	3013	1205	JP*LCON04	
03004	02	3040	1206	LCON02 CMAL*L477	END OF SEGMENT 3
03005	63	3010	1207	JPNOT*LCON03	NO
03006	70	0600	1210	ENTALK*600	YES-ADDR 600 STARTS SEGM 4
03007	34	3013	1211	JP*LCON04	
03010	02	3041	1212	LCON03 CMAL*L677	END OF SEGMENT 4
03011	61	3015	1213	JPEQ*LCONP	YES-DONE WITH THIS PATTERN
03012	71	0001	1214	ADDALK*1	NO-INCR ADDR CTR BY 1
03013	44	3045	1215	LCON04 STRAL*LACTR	MODIFY ADDR CTR
03014	34	2625	1216	JP*LCONB	REPEAT, CHANGING NEW ADDR
03015	12	3047	1217	LCONP ENTAL*LPAT	PATTERN OF ZEROES USED
03016	63	3076	1220	JPALNZ*FLUSH	NO-THROUGH WITH TEST
03017	70	7777	1221	ENTALK*7777	YES
03020	44	3047	1222	STRAL*LPAT	RESET PATTERN STORE=777777

03021	34	2623	1223		JP*LCONA
03022	00	0000	1224	LINIT	0*0
03023	12	3046	1225		ENTAL*LOOP
03024	63	3027	1226		JPALNZ*LOK+3
03025	36	0020	1227		ENTBK*20
03026	55	3022	1230		IJP*LINIT
03027	24	3036	1231		MULAL*L200
03030	36	0000	1232		ENTBK*0
03031	55	3022	1233		IJP*LINIT
03032	00	0001	1234	L01	000001*
03033	00	0003	1235	L03	000003*
03034	00	0011	1236	L9	000011*
03035	00	0077	1237	L77	000077*
03036	00	0200	1240	L200	000200*
03037	00	0277	1241	L277	000277*
03040	00	0477	1242	L477	000477*
03041	00	0677	1243	L677	000677*
03042	00	0000	1244	LADD	000000*
03043	00	0000	1245	LCORR	000000*
03044	00	0000	1246	LICORR	000000*
03045	00	0000	1247	LACTR	000000*
03046	00	0000	1250	LOOP	000000*
03047	00	0000	1251	LPAT	000000*
			1252	FLUSH1	PROG*MUELLER*80CT6
03050	00	0000	1253	FLUSH1	0*0
03051	12	3102	1254		ENTAL*PAR1
03052	44	3101	1255		STRAL*PAR
03053	12	3101	1256		ENTAL*PAR
03054	74	3056	1257		STRADR*LOK+2
03055	12	3104	1260		ENTAL*PAT1
03056	44	0000	1261		STRAL*0
03057	57	3101	1262		ISK*PAR
03060	34	3062	1263		JP*LOK+2
03061	34	3064	1264		JP*LOK+3
03062	76	1735	1265		RJP*CHK
03063	34	3053	1266		JP*FLUSH1+3
03064	11	102	1267		ENTAL*PAR1

RECYCLE WITH NEW PATTERN

LOOP CTR

IS 1,2,OR 3

IF 0,SET B=20 AND LEAVE AL=0

EXIT

SET AL=200,400,OR 600

SET R=0

EXIT

HOLDS ADDRESS FOR TYPEOUT
 HOLDS CORRECT DATA FOR TYPEOUT
 HOLDS INCORRECT DATA FOR TYPEOUT
 ADDRESS COUNTER
 LOOP COUNTER

PATTERN STORE

SR ENTRANCE

SET CONTROL MEMORY TO ALL ONES

SET UP INDEX COUNT

SET ADDRESS TO ONES

THROUGH

NO

YES-NOW CLEAR MEMORY

CONTINUE

SET CONTROL MEMORY TO ALL ZEROES

03065	44	3101	1270		STRAL*PAR	SET UP INDEX COUNT
03066	12	3101	1271	FLUSH2	ENTAL*PAR	
03067	74	3070	1272		STRADR*L0K+1	
03070	40	0000	1273		CL*0	SET ADDRESS TO ZEROES
03071	57	3101	1274		ISK*PAR	THROUGH
03072	34	3074	1275		JP*L0K+2	NO
03073	55	3050	1276		IJP*FLUSH1	YES EXIT
03074	76	1735	1277		RJP*CHEK	
03075	34	3066	1300		JP*FLUSH2	CONTINUE
			1301	FLUSH	PR0G*MUELLER*80CT61	
03076	76	3050	1302	FLUSH	RJP*FLUSH1	FLUSH CONTROL MEMORY
03077	50	5602	1303		STOP*02	SET STOP KEY1 TO STOP TEST
03100	34	1546	1304		JP*TRACK	
			1305	PAR	PR0G*MUELLER	8 OCT 64
03101	00	0000	1306	PAR	0*0	
03102	00	0000	1307	PAR1	0*0	
03103	00	0000	1310	PAT	00*0000	
03104	77	7777	1311	PAT1	77*7777	
03105	52	5252	1312	PAL1	52*5252	
03106	25	2525	1313	PAL0	25*2525	
03107	00	0000	1314	DIP	00*0000	
03110	00	0000	1315		00*0000	
03111	00	0000	1316	HERE	00*0000	
03112	00	0000	1317	THERE	00*0000	
03113	00	0000	1320	WHERE	0*0	
03114	00	0000	1321	ALPARN	0*	
			1322		REMARK*TYPT FOR 1202 OR 532	
03115	00	0000	1323	TYPT	0*	
03116	75	3157	1324		STRSR*TSPT20	
03117	46	3206	1325		STRAU*TSPT3	
03120	44	3207	1326		STRAL*TSPT4	
03121	42	3210	1327		STRB*TSPT5	
03122	70	0003	1330		ETALK*3	
03123	76	3171	1331		RJP*TSPT12	
03124	32	3115	1332	TSPT1	ENTB*TYPT	
03125	37	0001	1333		ENTBK*1	

03126	42	3115	1334		STER*TYPT	
03127	50	7310	1335		ENTSR*10	
03130	11	0000	1336		ENTAUB*0	
03131	50	7300	1337		ENTSR*0	
03132	36	0002	1340		ENTBK*2	
03133	70	0000	1341	T\$PT2	ENTALK*0	
03134	50	4706	1342		LSHA*6	
03135	02	3211	1343		CMAL*T\$PT6	
03136	01	3150	1344		JPEQ*T\$PT22	
03137	71	0040	1345	RN00P	ADDALK*40	MODIFIED TO RJP*CONVER IF 1232 SELECTED I
03140	02	3247	1346		CMAL*M136	CR-LF?
03141	63	3145	1347		JPNOT*LUK*4	NO
03142	70	0015	1350		ENTALK*15	CR
03143	76	3162	1351		RJP*T\$PT7	
03144	70	0012	1352		ENTALK*12	LF
03145	76	3162	1353		RJP*T\$PT7	
03146	73	3133	1354	T\$PT21	BJP*T\$PT2	
03147	34	3124	1355		JP*T\$PT1	
03150	70	0001	1356	T\$PT22	ENTALK*1	
03151	76	3171	1357		RJP*T\$PT12	
03152	14	3115	1360		ADDAL*TYPT	
03153	44	3115	1361		STRAL*TYPT	
03154	10	3206	1362		ENTAU*T\$PT3	
03155	12	3207	1363		ENTAL*T\$PT4	
03156	32	3210	1364		ENTB*T\$PT5	
03157	50	7300	1365	T\$PT20	ENTSR*0	
03160	76	3200	1366		RJP*T\$PT13	
03161	55	3115	1367		IJP*TYPT	
03162	00	0000	1370	T\$PT7	0*	
03163	76	3200	1371		RJP*T\$PT13	
03164	44	3213	1372		STRAL*T\$PT11	
03165	50	1200	1373	T\$1	BUFOUT*CHAN*AD*1*T\$PT11	
03166	00	3213				
03167	00	3213				
03170	55	3162	1374		IJP*T\$PT7	
03171	()	0000	1375	T\$PT12	0*	

03172	76	3200	1376		RJP*T\$PT13	
03173	44	3213	1377		STRAL*T\$PT11	
03174	50	1300	1400	T\$2	EXFCT*CHAN*AD*1*T\$PT11	
03175	00	3213				
03176	00	3213				
03177	55	3171	1401		IJP*T\$PT12	
03200	00	0000	1402	T\$PT13	0*	
03201	50	2300	1403	T\$3	SKPFIH*CHAN	
03202	34	3201	1404		JP*LOK-1	
03203	50	2200	1405	T\$4	SKPOIN*CHAN	
03204	34	3203	1406		JP*LOK-1	
03205	55	3200	1407		IJP*T\$PT13	
03206	00	0000	1410	T\$PT3	0*	
03207	00	0000	1411	T\$PT4	0*	
03210	00	0000	1412	T\$PT5	0*	
03211	00	0077	1413	T\$PT6	77*	
03212	00	0136	1414	T\$PT61	0*136	
03213	00	0000	1415	T\$PT11	0*	
03214	00	0000	1416	CONVER	0*	
03215	42	3244	1417		STRB*COUNTR	
03216	36	0000	1420		ENTRK*0	
03217	71	0040	1421		ADDALK*40	ADD ASCII BIAS
03220	02	3247	1422		CHAL*M136	CR-LF
03221	63	3226	1423		JPNOT*LOK+5	NO
03222	70	0004	1424		ENTALK*4	CR
03223	76	3162	1425		RJP*T\$PT7	
03224	70	0003	1426		ENTALK*3	LF
03225	34	3242	1427		JP*CONV3	
03226	44	3250	1430		STRAL*MDUM	
03227	13	3251	1431	CONV1	ENTALB*CONST	
03230	52	3245	1432		SLCL*CT177	
03231	50	4211	1433		RSHAL*9D	
03232	02	3250	1434		CHAL*MDUM	
03233	61	3240	1435		JPEO*CONV2	
03234	56	3246	1436		BSK*M70	
03235	34	3227	1437		JP*CONV1	

03236	12	3250	1440		ENTAL*MDUM
03237	50	5640	1441		STOP*40
03240	13	3251	1442	CONV2	ENTALB*CONST
03241	52	3211	1443		SLCL*TSPT6
03242	32	3244	1444	CONV3	ENTB*COUNTR
03243	55	3214	1445		1JP*CONVER
03244	00	0000	1446	COUNTR	0*
03245	17	7000	1447	CT177	177000*
03246	00	0100	1450	M76	000100*
03247	00	0136	1451	M136	000136*
03250	00	0000	1452	MDUM	0*
03251	10	1006	1453	CONST	101006*
03252	10	2007	1454		102007*
03253	10	3010	1455		103010*
03254	10	4011	1456		104011*
03255	10	5012	1457		105012*
03256	10	6013	1460		106013*
03257	10	7014	1461		107014*
03260	11	0015	1462		110015*
03261	11	1016	1463		111016*
03262	11	2017	1464		112017*
03263	11	3020	1465		113020*
03264	11	4021	1466		114021*
03265	11	5022	1467		115022*
03266	11	6023	1470		116023*
03267	11	7024	1471		117024*
03270	12	0025	1472		120025*
03271	12	1026	1473		121026*
03272	12	2027	1474		122027*
03273	12	3030	1475		123030*
03274	12	4031	1476		124031*
03275	12	5032	1477		125032*
03276	12	6033	1500		126033*
03277	12	7034	1501		127034*
03300	13	0035	1502		130035*
03301	13	1036	1503		131036*
03302	13	2037	1504		132037*

03303	01	5004	1505	015004*
03304	01	2003	1506	012003*
03305	13	7076	1507	137076*
03306	05	2050	1510	052050*
03307	04	7072	1511	047072*
03310	05	6075	1512	056075*
03311	04	0005	1513	040005*
03312	17	7077	1514	177077*
03313	06	0060	1515	060060*
03314	06	1061	1516	061061*
03315	06	2062	1517	062062*
03316	06	3063	1520	063063*
03317	06	4064	1521	064064*
03320	06	5065	1522	065065*
03321	06	6066	1523	066066*
03322	06	7067	1524	067067*
03323	07	0070	1525	070070*
03324	07	1071	1526	071071*
03325	05	0051	1527	050051*
03326	05	1040	1530	051040*
03327	05	3042	1531	053042*
03330	05	4056	1532	054056*
03331	05	5041	1533	055041*
03332	05	7074	1534	057074*
03333	07	2053	1535	072053*
03334	07	3073	1536	073073*
03335	07	4043	1537	074043*
03336	07	5044	1540	075044*
03337	07	6045	1541	076045*
03340	07	7054	1542	077054*
03341	10	0057	1543	100057*
03342	04	4047	1544	044047*
03343	05	2050	1545	052050*
03344	13	5046	1546	135046*
03345	13	4001	1547	134001*
03346	04	5002	1550	045002*

03347	04 2052	1551	042052*	
03350	04 1055	1552	041055*	
03351	13 0050	1553	136050*	
		1554	REMARK*TYPC FOR 12.2 OR 1532	
03352	00 0000	1555	0*	
03353	75 3443	1556	STRSR*T\$PC20	
03354	46 3445	1557	STRAU*T\$PC12	
03355	44 3446	1560	STRAL*T\$PC13	
03356	42 3447	1561	STRB*T\$PC14	
03357	70 0003	1562	ENTALK*3	
03360	76 3474	1563	RJP*T\$PC24	ENABLE KEYBOARD
03361	32 3352	1564	ENTB*TYPC	ADVANCE EXIT ADDR
03362	37 0001	1565	ENTBK*1	
03363	42 3352	1566	STRB*TYPC	
03364	50 7310	1567	ENTSR*10	
03365	11 0000	1570	ENTAUB*0	NEXT CODE WORD TO AU
03366	50 7300	1571	ENTSR*0	CLR SR ACTIVE
03367	70 0000	1572	ENTALK*0	
03370	50 4703	1573	LSHA*3	CODE DIGIT TO AL
03371	61 3435	1574	JPALZ*T\$PC11	ALL DONE IF ZERO
03372	44 3450	1575	STRAL*T\$PC15	TEMP STORE
03373	32 3450	1576	ENTB*T\$PC15	
03374	35 3374	1577	JPB*T\$PC2	
03375	34 3412	1600	JP*T\$PC3	KYBU COMMAND
03376	34 3424	1601	JP*T\$PC4	A
03377	34 3430	1602	JP*T\$PC6	A UPPER
03400	34 3426	1603	JP*T\$PC5	A LOWER
03401	34 3432	1604	JP*T\$PC7	B
03402	70 0000	1605	ENTALK*0	Y
03403	50 4717	1606	LSHA*17	
03404	44 3450	1607	STRAL*T\$PC15	
03405	32 3450	1610	ENTB*T\$PC15	
03406	50 7310	1611	ENTSR*10	
03407	11 0000	1612	ENTAUB*0	CONTENTS OF Y
03410	50 7300	1613	ENTSR*0	
03411	3433	1614	JP*T\$PC10	

03412	70	0000	1615	T\$PC3	ENTALK*0
03413	50	4717	1616		LSHA*15D
03414	61	3422	1617		JPALZ*T\$PCSP
03415	70	0015	1620	T\$\$\$1	ENTALK*15
03416	76	3463	1621		RJP*T\$PC21
03417	70	0012	1622	T\$\$\$2	ENTALK*12
03420	76	3463	1623		RJP*T\$PC21
03421	34	3361	1624		JP*T\$PC1
03422	70	0040	1625	T\$PCSP	ENTALK*40
03423	34	3420	1626		JP*LOK-3
03424	10	3445	1627	T\$PC4	ENTAU*T\$PC12
03425	76	3451	1630		RJP*T\$PC16
03426	10	3446	1631	T\$PC5	ENTAU*T\$PC13
03427	34	3433	1632		JP*T\$PC10
03430	10	3445	1633	T\$PC6	ENTAU*T\$PC12
03431	34	3433	1634		JP*T\$PC10
03432	10	3447	1635	T\$PC7	ENTAU*T\$PC14
03433	76	3451	1636	T\$PC10	RJP*T\$PC16
03434	34	3361	1637		JP*T\$PC1
03435	70	0001	1640	T\$PC11	ENTALK*1
03436	14	3352	1641		ADDAL*TYPC
03437	44	3352	1642		STRAL*TYPC
03440	10	3445	1643		ENTAU*T\$PC12
03441	12	3446	1644		ENTAL*T\$PC13
03442	32	3447	1645		ENTB*T\$PC14
03443	50	7300	1646	T\$PC20	ENTSR*0
03444	55	3352	1647		IUP*TYPC
03445	00	0000	1650	T\$PC12	0*
03446	00	0000	1651	T\$PC13	0*
03447	00	0000	1652	T\$PC14	0*
03450	00	0000	1653	T\$PC15	0*
03451	00	0000	1654	T\$PC16	0*
03452	70	0005	1655		ENTALK*5
03453	44	3450	1656		STRAL*T\$PC15
03454	70	0000	1657	T\$PC17	ENTALK*0
03455	50	4703	1660		LSHA*3

CONV 6 OCT DIGITS TO KYBD CD-TYPE

CONVERT-TYPE 6 OCT DIGITS

03456 71 0060 1661
 03457 76 3463 1662
 03460 57 3450 1663
 03461 34 3454 1664

ADDALK*60
 RJP*T\$PC21
 ISK*T\$PC15
 JP*T\$PC17

MAKE FIELD DATA DIGIT
 TYPE IT
 ARE 6 TYPED
 NO

03462 55 3451 1665
 03463 00 0000 1666
 03464 76 3504 1667
 03465 44 3473 1670
 03466 50 1200 1671
 03467 00 3473
 03470 00 3473
 03471 76 3504 1672

T\$PC21

IJP*T\$PC16
 0*
 RJP*T\$PC25
 STRAL*T\$PC23
 BUFOUT*CHAN*AD*1*T\$PC23

YES
 SEND KYBD CODE IN AL

03472 55 3463 1673
 03473 00 0000 1674
 03474 00 0000 1675
 03475 76 3504 1676
 03476 44 3473 1677
 03477 50 1300 1700
 03500 00 3473
 03501 00 3473

T\$PC23

T\$PC24

IJP*T\$PC21
 0*
 0*
 RJP*T\$PC25
 STRAL*T\$PC23
 EXFCT*CHAN*AD*1*T\$PC23

DO KYBD FCT CODE

03502 76 3504 1701
 03503 55 3474 1702
 03504 00 0000 1703
 03505 50 2300 1704
 03506 34 3505 1705
 03507 50 2200 1706
 03510 34 3507 1707
 03511 55 3504 1710

T\$PC25

T\$3

T\$4

RJP*T\$PC25
 IJP*T\$PC24
 0*
 SKPFIN*CHAN
 JP*LOK-1
 SKPOIN*CHAN
 JP*LOK-1
 IJP*T\$PC25

WAIT ON ACT FCT-DATA BUFS

03512 00 0000 1714
 03513 12 3114 1715
 03514 50 4203 1716
 03515 52 3603 1717
 03516 10 3604 1720

TYPE

REMARK*INSERT SELECTED I/O CHANNEL NUMBER
 REMARK*IN ALL I/O COMMANDS.
 REMARK*MODIFIED FOR 1232/1532 INTERCHANGE
 0*
 ENTAL*ALPARM
 RSHAL*3
 SLCL*K1
 ENTAU*K2

INITIAL AL INPUT PARAMETER
 CHANNEL NO. TO BITS 5-0
 000037
 777700

03517 04 3165 1721
 03520 44 3165 1722
 03521 04 3174 1723
 03522 44 3174 1724
 03523 04 3201 1725
 03524 44 3201 1726

SLSU*T\$1
 STRAL*T\$1
 SLSU*T\$2
 STRAL*T\$2
 SLSU*T\$3
 STRAL*T\$3

03525 04 3203 1727
 03526 44 3203 1730
 03527 04 3466 1731
 03530 44 3466 1732
 03531 04 3477 1733
 03532 44 3477 1734
 03533 04 3505 1735
 03534 44 3505 1736

SLSU*T\$4
 STRAL*T\$4
 SLSU*T\$51
 STRAL*T\$51
 SLSU*T\$52
 STRAL*T\$52
 SLSU*T\$53
 STRAL*T\$53

03535 04 3507 1737
 03536 44 3507 1740
 03537 12 3114 1741
 03540 50 4612 1742
 03541 52 3605 1743
 03542 74 3543 1744
 03543 36 0000 1745
 03544 13 3555 1746

SLSU*T\$54
 STRAL*T\$54
 ENTAL*ALPARM
 LSHAL*10D
 SLCL*K3
 STRADR*LOK+1
 ENTRK*0
 ENTALB*TYPE1

INITIAL AL INPUT PARAMETER
 1232/1532 BIT TO BIT 0
 000001

B IS 0 FOR 1232, 1 FOR 1532
 TABLE OF MODIFIED INSTRUCTIONS

03545 44 3137 1747
 03546 13 3557 1750
 03547 44 3415 1751
 03550 13 3561 1752
 03551 44 3417 1753
 03552 13 3563 1754
 03553 44 3422 1755
 03554 55 3512 1756

STRAL*RN00P
 ENTALB*TYPE1+2
 STRAL*T\$51
 ENTALB*TYPE1+4
 STRAL*T\$52
 ENTALB*TYPE1+6
 STRAL*T\$PCSP
 IJP*TYPE

03555 76 3214 1757
 03556 71 0040 1760
 03557 70 0004 1761
 03560 70 0015 1762
 03561 70 0003 1763
 03562 70 0012 1764

TYPE1

REMARK*TABLE OF 1232/1532 MODIFIED INSTRUCTIONS
 RJP*CONVER 1232
 ADDALK*40 1532
 ENTALK*04 1232
 ENTALK*15 1532
 ENTALK*03 1232
 ENTALK*12 1532

03563	70	0005	1766	ENTALK*05	1232
03564	70	0040	1767	ENTALK*40	1532
			1770	REMARK*MODIFY OUTPUT AND EXF	BUFFERS FOR N+1 TERMINATION
03565	00	0000	1771	IOSET	0*
03566	12	3167	1772		ENTAL*T\$1+2
03567	71	0001	1773		ADDALK*1
03570	44	3166	1774		STRAL*T\$1+1
03571	12	3176	1775		ENTAL*T\$2+2
03572	71	0001	1776		ADDALK*1
03573	44	3175	1777		STRAL*T\$2+1
03574	12	3470	2000		ENTAL*T\$51+2
03575	71	0001	2001		ADDALK*1
03576	44	3467	2002		STRAL*T\$51+1
03577	12	3501	2003		ENTAL*T\$52+2
03600	71	0001	2004		ADDALK*1
03601	44	3500	2005		STRAL*T\$52+1
03602	55	3565	2006		IJP*IOSET
03603	00	0037	2007	K1	000037*
03604	77	7700	2010	K2	777700*
03605	00	0001	2011	K3	000001*
			2012		ENDATA*

LABELS AND ADDRESSES

AIR	02305	AIR1	02325	ALPARM	03114	ALTO	02160	ALT1	02115
ATOCK	02162	ATOCK1	02176	ATICK	02117	ATICK1	02133	BAER	01606
CUNST	03251	CONV1	03227	CONV2	03210	CONV3	03242	CONVER	03214
COUNT	01604	COUNT _R	03244	CAIR	02411	CAIR1	02461	CCKWP	02400
CCKWP1	02402	CCKWP2	02407	CCKWP3	02415	CCKWP4	02424	CCKWP5	02432
CHAN	00000	CHEK	01735	CHEK1	01716	CHEK2	01757	CHEK3	01760
CHEK4	01737	CHEK5	01751	CKWP	02214	CKWP1	02246	CKWP13	02345
CKWP14	02346	CKWP2	02253	CKWP3	02211	CKWP4	02270	CKWP5	02276
CRANK	01532	CT177	03245	CWP1	02317	CWP2	02352	CWP3	02356
CWP4	02367	DIP	03107	ERROUT	01607	ERRT1	01732	ERRT2	01733
ERRT3	01734	FLUSH	03076	FLUSH1	03050	FLUSH2	03066	HOCK	02011
HUCK1	02024	HALT	02104	HALTO	02147	HDO	02007	HD1	02041
HEAD	01535	HERE	03111	HICK	02054	HICK1	02070	HLD1	02052
IUSET	03565	IMAGE	07000	INT2	01450	INT20	01452	INT21	01462
INT22	01463	K1	03603	K2	03604	K3	03605	LOOP	03046
LO1	03032	L03	03033	L200	03036	L277	03037	L477	03040
L677	03041	L77	03035	L9	03034	LACTR	03045	LADD	03042
LCON	02622	LCON0	02771	LCON01	02776	LCON02	03004	LCON03	03010
LCON04	03013	LCONA	02623	LCONB	02625	LCONC	02626	LCOND	02631
LCONE	02642	LCONE1	02644	LCONF	02647	LCONG	02652	LCONH	02661
LCONI	02664	LCONJ	02667	LCONK	02677	LCONL	02751	LCONM	02754
LCONN	02764	LCONN1	02766	LCONP	03015	LCORR	03043	LICORR	03044
LINIT	03022	LPAT	03047	M136	03247	M76	03246	MAIN	03700
MDUM	03250	NUMB	01605	PAL0	03106	PAL1	03105	PAR	03101
PAR1	03102	PAT	03103	PAT1	03104	POXY	01571	PROOF	01761
RAN	02607	RAN1	02610	RAN2	02620	PAN3	02621	RAN4	02616
RECYL	01575	RNOOP	03137	RW	02501	RW10	02603	RW11	02604
RW2	02507	RW20	02561	RW21	02513	RW22	02547	RW23	02563
RW3	02526	RW30	02605	RW31	02606	RW4	02532	RW5	02544
RW6	02546	RW7	02554	SF	01730	SIZE	01500	SIZE1	01523
SIZE2	01524	SIZE3	01526	SIZE4	01530	SIZE5	01531	SIZE6	01516
SIZE7	01520	T\$\$\$1	03415	T\$\$\$2	03417	T\$\$\$1	03466	T\$\$\$2	03477
T\$\$\$3	03505	T\$\$\$4	03507	T\$1	03165	T\$2	03174	T\$3	03201
T\$4	03203	T\$PC1	03301	T\$PC10	03433	T\$PC11	03435	T\$PC12	03445

T\$PC13	03440	T\$PC14	03447	T\$PC15	03450	T\$PC16	03451	T\$PC17	03454
T\$PC2	03374	T\$PC20	03443	T\$PC21	03453	T\$PC23	03473	T\$PC24	03474
T\$PC25	03504	T\$PC3	03412	T\$PC4	03454	T\$PC5	03426	T\$PC6	03430
T\$PC7	03432	T\$PC52	03422	T\$PT1	03154	T\$PT11	03213	T\$PT12	03171
T\$PT13	03200	T\$PT2	03133	T\$PT20	03157	T\$PT21	03146	T\$PT22	03150
T\$PT3	03206	T\$PT4	03207	T\$PT5	03210	T\$PT6	03211	T\$PT61	03212
T\$PT7	03162	TEST	01777	THERE	03112	TRACK	01546	TYPC	03352
TYPE	03512	TYPE1	03555	TYPT	03115	WHERE	03113	WP1	02212
WP2	02215	WP3	02221	WP4	02212	WP5	02243		